Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2 and 25 of the	)	ET Docket No. 96-20
Commission's Rules to Allocate the	)	RM-8638
13.75-14.0 GHz Band to the	)	
Fixed-Satellite Service	)	

COMMENTS OF GE AMERICAN COMMUNICATIONS, INC.

GE American Communications, Inc. ("GE Americom"), by its attorneys, hereby submits its comments on the Notice of Proposed Rule Making in the above-captioned proceeding, FCC 96-55, released Feb. 23, 1996 ("*Notice*"). GE Americom strongly supports the Commission's proposal to allocate the 13.75-14.0 GHz band to the Fixed-Satellite Service for uplink transmissions. Allocation of this extended Ku-band spectrum will give FSS providers added design flexibility and help them accommodate the growing demand for their services. GE Americom itself has applied for authority to construct and launch two satellites and to construct a ground spare that would utilize extended Ku-band spectrum.[1]

However, we request that the Commission modify its proposal in one respect by eliminating the prohibition on use of the 10.95-11.2 and 11.45-11.7 GHz downlink bands by domestic systems. There is no technical basis for this

[1] *See* File Nos. 18/19-SAT-P/LA-96 & 20-SAT-P-96.

restriction, and it is inconsistent with new Commission policies regarding unified treatment of domestic and international satellite systems.

INTRODUCTION

The *Notice* proposes giving the FSS a co-primary allocation in the 13.75-14.0 GHz extended Ku-band. This spectrum is part of a band that has historically been exclusively allocated to government radiolocation services on a primary basis and is used for high-powered mobile radars as well as TDRSS, NASA's Tracking and Data Relay Satellite System. At WRC-92, the 13.75-14.0 GHz band was allocated for FSS uplink operations on a co-primary basis, and criteria to permit sharing between FSS and existing services in the band were adopted as well. The *Notice* proposes to incorporate these criteria into the Commission's rules.

The Notice stems from a petition for rulemaking filed by Hughes Communications Galaxy, Inc. ("HCG"). In its petition, HCG noted that the 10.95-11.2 and 11.45-11.7 GHz downlink bands allocated to FSS are not paired with corresponding uplink bands, resulting in a shortfall of uplink spectrum. Allocation of the 13.75-14.0 GHz band would reduce this shortfall, HCG argued. In addition, HCG noted that more than one hundred satellite systems worldwide have filed ITU documents reflecting their intention to use the 13.75-14.0 GHz band, including systems proposing to locate their satellites in slots capable of providing service to and from the United States. As a result, in addition to effectuating the WRC-92 Final Acts, allocation of the spectrum in the United States will enhance the ability

of U.S.-licensed FSS operators to compete in the international market. No party filed comments opposing the HCG petition. *See Notice* at ¶ 7.

In proposing to allocate the 13.75-14.0 GHz band to FSS, the Commission rejected the suggestion by HCG that the band be made available for use only by international systems. The Commission noted that such a restriction would be inconsistent with its recent actions eliminating distinctions between domestic and international FSS systems. *Notice* at ¶ 9. However, the Commission did not propose to eliminate the prohibition on use of the 10.95-11.2 and 11.45-11.7 downlink bands for domestic use. The Commission noted that the downlink restriction is intended to protect domestic fixed services operating in those bands. *Notice* at ¶ 9 & n.19.

GE Americom urges the Commission to proceed with its proposal to allocate the 13.75-14.0 GHz band to FSS uplinks on a co-primary basis. GE Americom believes that availability of the spectrum will significantly enhance the ability of U.S.-licensed FSS operators to meet the needs of their customers and to compete in the global service market. As noted above, GE Americom itself has requested authority to construct and launch satellites using these frequencies.

Retention of the prohibition on domestic use of the 10.95-11.2 and 11.45-11.7 GHz downlink bands, however, is not justified. GE Americom has proposed to use extended Ku-band frequencies to provide international services. However, the Commission has made clear that customers are permitted to use international separate system satellites to meet the customers' domestic service

needs as well. There is no technical reason to restrict such use here. Accordingly, we request that the Commission remove the restriction on domestic use of these frequency bands.

I. GE AMERICOM FULLY SUPPORTS THE PROPOSED ALLOCATION OF THE 13.75-14.0 GHZ EXTENDED KU-BAND SPECTRUM FOR FSS UPLINKS

GE Americom agrees completely with the Commission that "the growing international and domestic demand for FSS services should be accommodated by making [extended Ku-band] spectrum available for FSS operations." *Notice* at ¶ 8. The Commission is well aware of the existing shortage of C-band FSS capacity and the increasing congestion in the Ku-band. Extended Ku-band spectrum can play a critical role in helping satellite providers meet the needs of current and future customers. GE Americom, for example, has proposed to utilize extended Ku-band frequencies to enter the market for distribution of video services to Latin America in order to respond to the demands of our customers for increased capacity to deliver video programming abroad.

As the Commission recognizes, adopting the proposed allocation will increase the competitiveness of U.S. satellite providers and provide more choices for customers. *Notice* at ¶ 8. Action on the Commission's proposal is needed to allow U.S.-licensed FSS providers to respond to the numerous proposals by satellite systems from other countries that plan to use extended Ku-band frequencies.

Allocation of extended Ku-band spectrum will also significantly enhance the ability of satellite providers to make efficient use of the orbital arc. As

the Commission observes, the opportunity to co-locate satellites in the same orbital position that use different frequency bands will give satellite operators added flexibility in system design. This, in turn, provides customers with the ability to access a broader range of services from a given earth station site.

These benefits of an extended Ku-band allocation for FSS are uncontroverted and clearly warrant prompt Commission action to adopt the proposals in the *Notice*.

II. THE COMMISSION SHOULD ELIMINATE THE PROHIBITION ON DOMESTIC USE OF THE 10.95-11.2 AND 11.45-11.7 GHZ DOWNLINK BANDS

We urge the Commission to alter its proposal in one respect, however. Specifically, GE Americom does not believe that there is any justification for retaining the domestic system prohibition on the use of the 10.95-11.2 and 11.45-11.7 GHz bands that are allocated to the FSS for space to earth transmissions. This restriction is inconsistent with existing Commission policies and should be eliminated.

A. The Prohibition Is Not Necessary to Protect Terrestrial Services

The only rationale provided in the *Notice* for restricting use of the 10.95-11.2 and 11.45-11.7 GHz bands is that "prohibition of domestic use of these bands provides technical protection for fixed services operating domestically in the bands." *Notice* at n.19. This rationale is flawed for two reasons.

First, since the bands at issue are allocated for downlinks, there is no basis for distinguishing between use by domestic and international systems. Any interference potential resulting from FSS use of these bands will be the same regardless of whether a given transmission is coming from a domestic satellite system or an international one. As a result, the prohibition on domestic use has no relationship to the Commission's stated purpose of protecting terrestrial services from interference.

Second, the goal of protecting terrestrial systems from interference can readily be achieved without this prohibition. We note that concerns about interference by FSS operations to terrestrial services are normally limited to the use of spectrum for FSS uplinks. With respect to downlink spectrum, it is more likely that the terrestrial system would cause interference with the FSS transmissions. Thus, it is very unlikely that terrestrial services would require any protection from FSS operations in the 10.95-11.2 and 11.45-11.7 GHz bands.

But in any event, to the extent that interference concerns do arise, they should be dealt with through coordination. Currently FSS operators are routinely required to coordinate with terrestrial systems in some frequency bands, and there is no reason why coordination cannot also be used to prevent harmful interference here. For example, certain C-band frequencies are shared between FSS and terrestrial microwave systems, and earth station operators accordingly must coordinate with nearby microwave operations. Any interference potential

raised by FSS use of the 10.95-11.2 and 11.45-11.7 GHz downlink bands should be addressed in the same way.

B. The Prohibition Is Inconsistent With Commission Policies Implementing Unified Treatment of All U.S.-Licensed FSS Systems

The Commission's recent decision implementing a single regulatory structure for all FSS systems provides an independent reason for revoking the restriction on use of these downlink bands by domestic FSS systems. Specifically, the Commission's "DISCO" order "eliminate[d] the outdated regulatory framework that distinguished domsats from separate systems."[2] The decision adopted uniform financial qualifications requirements and processing procedures and permitted all U.S.-licensed FSS systems to offer both domestic and international service on a going-forward basis. The Commission found that these "changes were needed to satisfy the growing needs of customers for both domestic and international communications services." *Id.* at ¶ 3.

Retaining the prohibition on use of the 10.95-11.2 and 11.45-11.7 GHz downlink bands would be directly contrary to this policy. In the *Notice* here the Commission rejected the suggestion by HCG that the new allocation of extended Ku-band uplink spectrum should be limited to international systems. *Notice* at ¶ 9. The Commission determined that making the spectrum available for both domestic

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[2] Report and Order, Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, FCC 96-14 at ¶ 74 (released Jan. 22, 1996).

and international use was consistent with its decision in DISCO to treat "all U.S. licensed geostationary fixed-satellite systems under the same regulatory scheme." *Id.* The restriction proposed by HCG, the Commission concluded, was "not technically justified and would needlessly impair businesses' ability to meet their customers' needs." *Id.*

The same analysis applies to the restriction on use of the downlink spectrum. The prohibition on domestic use is inconsistent with the DISCO policy. That order effectively eliminated the distinctions between domestic and international systems. Thus, it is unclear how the prohibition on domestic use of the downlink spectrum could even be enforced, since the dividing line between these types of systems has been erased. As discussed above, the prohibition has no technical justification, and would merely serve as an unnecessary limit on the flexibility of FSS providers and the efficiency of their frequency use.

GE Americom therefore urges the Commission to eliminate the prohibition on domestic use of the 10.95-11.2 and 11.45-11.7 GHz downlink bands by deleting footnote 2 in Section 25.202(a)(1), and renumbering the remaining footnotes accordingly.

CONCLUSION

For the foregoing reasons, the Commission should move ahead with its proposal to allocate the 13.75-14.0 GHz band on a co-primary basis to the fixed-satellite service for earth-to-space transmissions. However, the Commission should

also eliminate the prohibition on domestic use of the 10.95-11.2 and 11.45-11.7 GHz bands for space-to-earth transmissions.

Respectfully submitted,

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CERTIFICATE OF SERVICE

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